



Additional File 10. Expression of ncRNAs associated with ultraconserved elements. (A) Genomic context of the *Dlx1* and *Dlx2* gene (dark blue), the ncRNA *Dlx1AS* (AK132348; red) showing the position of ultraconserved element with previously described enhancer function (VISTA 422; green) and histogram of vertebrate conservation (dark blue). (B) Enhancer (VISTA 422) function driving reporter gene expression in the developing forebrain (red arrow) of 11.5 day mouse embryo [55]. Images courtesy of VISTA Enhancer Browser (http://enhancer.lbl.gov/frnt_page.shtml). (C) Expression of *Dlx1AS* (red) and *Dlx1* gene (blue) during OL differentiation (expression is relative to NSCs and error bars show standard deviation). *Dlx1AS* ncRNA is upregulated in GABAN, similar to *Dlx1*, but downregulated in N/OPs and in different stages of OL differentiation (OLPs, PMOs, MYOs). (D) Genomic context of the *Dlx5* and *Dlx6* genes (blue) and the ncRNA *Evf* transcripts (1 and 2; red) showing the position of two ultraconserved elements with previously described enhancer function (VISTA 298 [55] and the enhancer described by Feng et al. [31]; green) and histogram of vertebrate conservation (dark blue). (E) Enhancer (VISTA 298) function driving reporter gene expression in the developing forebrain (red arrow) of 11.5 day mouse embryo [55]. Images courtesy of VISTA Enhancer Browser (http://enhancer.lbl.gov/frnt_page.shtml). (F) Expression of *Evf* (red) and *Dlx5* gene (blue) during oligodendroglioneogenesis (expression is relative to NSCs and error bars show standard deviation). The *Evf* ncRNA (red) is upregulated during GABAN, similar to *Dlx5* (blue), but downregulated in N/OPs and later stages of oligodendroglioneogenesis (OLPs, PMOs, MYOs). (G) Genomic context of the novel AK005755 ncRNA (red) showing the position of; ultraconserved element with previously described enhancer function (VISTA 433; green) and histogram of vertebrate conservation (dark blue). (H) Enhancer (VISTA 433) function driving reporter gene expression in the developing forebrain (red arrow) of 11.5 day mouse embryo [55]. Images courtesy of VISTA Enhancer Browser (http://enhancer.lbl.gov/frnt_page.shtml).